applying an electrical bias to said substrate so as to create an electrostatic attraction between said counterweight and said substrate, which causes said torsional beam to rotate and thereby re-position said mirror head.

Add new claims 25 to 29 as follows:

25. (New) An optical micro-electromechanical device, comprising:

a substrate; and

a mirror assembly suspended above said substrate, said mirror assembly including:

a torsional beam attached to said substrate,

a cantilever with a cantilever first end and a cantilever second end, said cantilever first end being attached to said torsional beam, said cantilever second end supporting a mirror head, said cantilever having a first length measured from said cantilever first end to said cantilever second end,

a connector attached to said torsional beam, and

a counterweight with a counterweight first end and a counterweight second end, said counterweight first end being attached to said connector, said counterweight second end being suspended above the substrate, said counterweight having a second length measured from said counterweight first end to said counterweight second end, said second length being less than said first length.

26.(New) The optical micro-electromechanical device of claim 25 wherein the mirror head comprises distributed Bragg reflectors.

27.(New) The optical micro-electromechanical device of claim 25 wherein the substrate comprises distributed Bragg reflectors.

28.(New) The optical micro-electromechanical device of claim 25 wherein the substrate acts as a mirror to form a Fabry-Perot cavity between the substrate and the mirror assembly.

29.(New) A method of operating an optical micro-electromechanical device, said method comprising the steps of:

positioning a mirror assembly over a substrate, said mirror assembling including:

a torsional beam attached to said substrate, a cantilever with a cantilever first end and a cantilever second end, said cantilever first end being attached to said torsional beam, said cantilever second end supporting a mirror head, said cantilever having a first length measured from said cantilever first end to said cantilever second end,

a connector attached to said torsional beam, and

a counterweight with a counterweight first end and a counterweight second end, said counterweight first end being attached to said connector, said counterweight second end being suspended above the substrate, said counterweight having a second length measured from said counterweight first end to said counterweight second end, said second length being less than said first length; and

applying an electrical bias to said substrate so as to create an electrostatic attraction between said counterweight and said substrate, which causes said torsional beam to rotate and thereby re-position said mirror head.